Flipside Up!

24

Flipside Up!

At what Side of the Coin are we looking?

Fred Zijlstra & Henny Mulders

Wilmar Schaufeli trained as Clinical psychologist, counselling people with depressive feelings, and moved to Occupational Health research to make the topic of 'burnout' to his central theme. After several years, he traded 'burnout' in for the concept of 'engagement'. Those three topics are centred around 'motivation', either in a clinical or practical context; the latter two deal explicitly with 'motivation to work'. However, these topics are also closely related to 'mental health'. Motivation is a central theme in psychology: what drives people, and how can we influence their motivation to work? The classical view is that whether people are motivated to work largely depends on whether they like their job (i.e. how jobs are designed). However, job design not only affects motivation, it also determines whether people have access to organisations. Managers (and researchers) often overlook this aspect. Burnout and engagement both assume that people have a job, which applies to only a part of the population

Introduction

Motivating people is one of the classic topics in Work & Organisation psychology. How to get people to do their work, or rather how do we get the most/best out of people, is a brainteaser for many managers. In light of the increasing demand for efficiency, the quest for making people work harder/better, and getting the most out of them, has become very popular with managers. This implies that managers are very interested in finding ways to get employees to be even more engaged in their work. However, the question for them is 'what works better'? Should they emphasise 'discipline' or 'motivation', carrot or stick? They seem opposites, but, in fact, are opposite sides of the same coin.

However, there are more juxtapositions in this domain, for instance, work has not only clear benefits, there are also disadvantages. Work allows to participate in society (provides income, independence, security, is good for mental health), while on the other hand it makes us tired, may lead to frustrations, and can make us ill. Another issue concerns the fact that people with disabilities and limitations are highly underrepresented on the labour market (see ILO report 2018). Only 40 % of people with disabilities have a chance to work (compared to approx. 80 % of people without disabilities. Apparently, people with disabilities or limitations do not have a fair chance on the labour market. These people may want to work (so, there is motivation), but obstacles prevent them to work. So again, these issues also represent two sides of a coin.

In this chapter we will argue that for understanding the process of motivating people the topic of designing jobs is essential. Also providing access to the labour market for people with limitations requires (re)designing jobs. Willing to work, and being able to work, are two sides of a coin. The latter being grossly ignored by mainstream W&O psychology, hence: flipside up!

This also points towards an old discussion: what are the objectives of W&O psychologists; where does our loyalty lie: with the employees, or with the employers? Do we focus on increasing motivation, or should we facilitate decent jobs for all? Are these options also two sides of the same coin? And how do we chose, just by flipping the coin? Psychologists have always claimed (see mission statement of professional bodies, like NIP; Dutch Association for Psychologists): to promote productivity/efficiency AND job satisfaction/wellbeing of workers/employees. Should these also be seen as two sides of a coin, or can we strive towards 'joint optimisation' through work design. We will start with an historic perspective on job design and argue that job design mostly intends to enhance motivation of employees, but has overlooked the fact that job design

also determines who has access to organisations. Implying that job design does not solely focus on individuals, but needs to include the social context.

Historical perspectives

Many people consider Frederic Taylor as a founding father of the discipline of Industrial or Occupational Psychology, or Work and Organisational Psychology, as we call it nowadays. Frederic Taylor (1919) has built upon the work of Adam Smith (1776), and Charles Babbage (1822) concerning division of labour and specialisation. For W&O psychology Taylor's legacy contains two important elements; his main drive was to improve efficiency by trying to 'get the most out of people'. His approach was methodological: he started with observing how people work, and collected data regarding how long certain operations took, and subsequently prescribed the only right way to perform the task. And in order to demonstrate that his suggestions worked, he selected men that were willing and able. This is nowadays known as 'Taylorism'. For many this is synonymous to 'time and motion' studies, as also many think that these time and motion studies are synonymous for 'job analysis'. However, for Work & Organisational Psychology the importance and relevance of this work lies in the fact that he, based on his findings, suggested alternative ways to execute the work. Essentially, this is 'job design'. Following the ideas of Smith and Babbage regarding the division of work between people, Taylor focused on prescribing individuals what to do to improve efficiency. And in fact, through designing individual jobs people started (re)thinking organisations again. What was the best way to design/structure an organisation? The French mining engineer, and contemporary of Taylor, Henri Fayol presented 14 principles for organising and structuring organisations (Fayol, 1916).

For both, Taylor and Fayol, improving efficiency of workers and the organisation was the main aim. This is also true for many W&O psychologists today, hence their efforts to improve or influence motivation, and/or the level of engagement in work. Taylorism is probably most well-known because a distinction was made between 'hand' versus 'head' labour, or rather between those who *plan* the work and those who *execute* the tasks following strict instructions.

Henry Ford applied Taylor's ideas and introduced the assembly line in his automobile factory. Instead of having employees moving through the production hall from one workstation to the other, now the cars moved through the production hall and employees remained at their station.

This way they didn't lose time by moving from one workstation to the other, and the assembly line could determine the speed of work, which forced the employees to engage with their task. This is the innovation introduced by Ford, and it is sometimes referred to as 'Fordism'. It is clear that assembly line work is routine work, and most people find this very boring, which reduces people's willingness to do this kind of work. But when employees are unwilling to do what needs to be done, managers have, in principle, two options: 1) try to motivate the employees (carrot), or 2) try a strict discipline (stick). In the days of Taylor and Ford, bosses (or managers) were probably more inclined to focus on discipline. Through close and strict supervision they made clear what needed to be done, and disciplinary measures would be applied when someone violated the rules. The other perspective of motivating people came later, after the 'Human Relations Movement' had emerged (in the 1920's) (Smith, 1987). In an attempt to avoid the routine and monotony of assembly line work, 'job rotation' was introduced, which implied that people could rotate to different workstations along the assembly line. This way employees didn't have to make the same movements every day. Actually, job rotation was primarily a way to counteract physical fatigue by alternating the movements people had to make, but was not necessarily making the job more interesting. In fact, sometimes it appeared that it could be useful to combine some of the simple operations in one workstation, and that was introduced as 'job enlargement'. However, this still did have no effect in terms of making work more interesting, because: "adding one Mickey Mouse job, to another Mickey Mouse job, just makes two Mickey Mouse jobs".

Soon managers figured out that they also needed somebody to check whether quantity, and if possible also quality, of the production was according to the prescribed standards. And when they assigned this as a task to one of the group members this appeared to be more interesting for this person: and others would like to have this option as well: So, they called it 'vertical job enlargement'. People did a few things more, but in fact they now had something to say about their job: quality control. Whereas in the Tayloristic approach, 'hand' and 'head' labour ('execution' versus 'planning and control') were clearly separated, this in fact gave employees a little bit of control over their work again. This was a first step away from the pure Tayloristic approach. At the same time it also made clear that how tasks were designed had an effect on people's willingness to be engaged in their work.

From efficiency to motivating people

Originally, job design primarily aimed at increasing production efficiency and reducing physiological responses to work (i.e. fatigue) (Rousseau, 1977). But when motivating people also became a factor, this implied that one had to start thinking about other design criteria. In fact, most of the work concerning the relationship between motivation and job design started in the 1960's. Herzberg and colleagues (1959; 1964) published the Dual Factor theory (or Motivation – Hygiene theory), based on interviews with some 200 white-collar professionals (engineers and accounts) from the Pittsburgh (USA) area (Ewen, 1964). They asked them to indicate "when in their lives they had been happy and unhappy in their work". This resulted in factors that generally gave satisfaction in work (responsibility, achieving things, being interested in their work), and factors that contributed very little to satisfaction (so-called dis-satisfiers: working conditions, relationship with colleagues, salary, company policies). The 'Dual Factor theory' thus emerged from their empirical findings. A few years later Hackman & Oldham presented the Job Characteristics Model (JCM), which was based on the work by Turner & Lawrence (1965) who examined six Requisite Task Attributes (RTA's) i.e. variety, autonomy, required interaction, optional interaction, knowledge and skill required, and responsibility. When Hackman & Oldham (1974) presented their Job Characteristics Model they hypothesised that five core job characteristics would lead to 'critical psychological states' that in turn would influence job satisfaction, turnover, and thus actually the motivation to work. By that time they omitted the social characteristics of work in their model. A decision they much later considered to be rather short-sighted (see Hackman & Oldman, 2010). They later acknowledged the fact that work is generally not an individual process (as their JCM may suggest), but includes the cooperation with others, and therefore the social context of work should also receive attention.

How jobs are designed is generally a result of the division of work in organisations, or rather how work is organised. The division of work determines who executes particular activities, and this is the result of a set of agreements between people concerning when and how to do things. These agreements are not 'cut in stone' and can be altered if needed, and that is the basis for modern job design (see Roe & Zijlstra, 1991). The implication is that the best way to influence employees' motivation, and their engagement with work is via an adequate design of their jobs. The larger an organisation becomes, the more complex it is to change the set of agreements because more people are likely to be involved.

Another way to influence peoples' willingness to continue working is allowing them to experience some level of achievement, allowing them to experience success. This is implicit in Hackman & Oldham's JCM: one of the critical states is 'knowledge of results', and 'feeling responsible'. If employees know and see that they have been successful with their efforts, this generally gives them a motivational boost, and makes them continue with what they do. This is a basic element from various psychological theories (Locke & Latham, 1990). Also some studies suggest that there is nothing more engaging as 'having success', and 'feelings of accomplishment' (cf. Grebner, Elfering, & Semmer, 2010.)

Not just motivation

However, task characteristics do not only affect motivation, but they also affect other responses to tasks. And, as we will argue later on, task characteristics also determine whether people will have an opportunity to work. The factors that, according to the JCM (Hackman & Oldham, 1974), have a motivational effect on employees can also be seen as risks for health and well-being when they are absent. The stress literature is full of examples. Whereas autonomy and task variety are generally considered factors that facilitate job satisfaction and motivation, the lack of these task characteristics are seen as 'stressors'. The ultimate consequence of lack of autonomy is being forced to work in a particular work pace, as working on the assembly line generally entails. Various studies have indicated that this has severe negative consequences for mental health (cf. Blauner, 1964; Johansson & Lundberg, 1978). The level of responsibility of a job incumbent is also a characteristic of his task that is generally seen as a potential stressor (cf. Carayon & Zijlstra, 1999), whereas having some level of responsibility is generally seen as a motivator as well. The implication is that how tasks and jobs are designed largely determines their behaviour at work and how they perceive their tasks. The psychological impact work has on people, in terms of willingness to work, level of engagement in work, or risks for health and well-being, is largely determined by the design of their jobs (cf. Roe & Zijlstra, 1991). Job design is immediately related to how work is organised, and thus also determines how much work a person has to do (i.e. the workload), and when the work needs to be finished (time perspective), and together with the available capacity this determines how much work pressure employees experience (Roe & Zijlstra, 2000). Therefore the way work is organised and jobs are designed determines also largely who is allowed to enter the labour market.

This brings us to another, but less known, aspect of Henri Ford's work. Ford introduced in 1914 various social policy measures, like an 8-hour work day, a 'minimum wage' of 5 Dollars a day, and importantly he ordered that job applicants would not be rejected because of their physical condition, and nobody would be made redundant because of health conditions. Evidently, he needed many employees, so there may have been some self-interest there, because working on the assembly line was not very attractive for most people: the jobs were very simple, involving only routine activities, and therefore these jobs were quite boring. At some point, Ford made an inventory of the kind of work in his organisation. It appeared that there were 7882 jobs in his factory; for 43 % of these jobs the time to learn that job was less than 1 day, and for 36 % of the jobs learning time was between 1 day and 1 week. Consequently, Ford knew quite well what kind of work was needed in his factory: according to his inventory, there were 949 jobs that required heavy work, 3338 jobs that required ordinary strength, and 3595 jobs that involved only light work. He also analysed that 4034 jobs did not require 'full physical capacity', 670 jobs for persons without legs, 2637 jobs for persons with only one leg, 715 for persons with only one arm, and 2 for persons without arms, and 10 for blind persons. In total, Ford had 9563, what he called, 'sub-standard' men employed (Snow, 2013).

Although the jobs in Ford's factory were not particularly adjusted to allow people with disabilities to be employed, it was more like a natural experiment, it does clearly illustrate that, under certain conditions, also people with disabilities can contribute to society, and provide in their own living. This was in line with Ford's ideas: "If an industrial institution is to fill its whole role, it ought to be possible for a cross-section of its employees to show about the same proportions as a cross-section of society in general." (Ford, 1923; chapter VII, p. 75). It might be considered a tragic omission (not to say error), that while debating 'poorly designed' Tayloristic work design and proving the point of 'well-designed work' this central notion of Henry Ford got lost. Social inclusion is absent as a design criterion in today's mainstream theories of work design.

Towards a new perspective on job design

As argued above, job design, in the Tayloristic tradition, used to be primarily aimed to increase productivity, and then later, in the Industrial era, to enhance the motivation of employees. While in the 1970's and 1980's, when technology became an important factor, job design was mainly aiming to improve the quality of work. In order to improve the quality of work, characteristics of

the task, like autonomy, responsibility and task variety were the levers to make jobs more attractive for their incumbents. However, in many instances this also resulted in work becoming more demanding as well (cf. Wegman, et al, 2018). Higher levels of qualifications are required from job incumbents. A recent publication (Fouarge, 2017) illustrated that nowadays the labour market requires more employees with 'high problem solving skills, and high interpersonal skills' than a decade ago.

This increase in demands has several consequences for the working population: First, we have seen an increase in complaints regarding work pressure and intensity of work. According to the latest survey of Eurofound (Parent-Thirion, et al, 2016) approximately 66% of the working population in Europe complains about 'high' to 'very high' levels of work pressure and intensity of work. Although it is hard to make a direct link between this increase of demands and the current high levels of health complaints, in particular mental health complaints, like burnout and feelings of depression, this trend suggests that we are demanding too much of employees. It also implies that sustainability of employment is under threat in many organisations (van der Klink, et al, 2016; Fleuren, et al, 2018). Secondly, the threshold for entering (or sometimes remaining in) the labour market has become too high for an increasing group of people. The group that is qualified as 'having a distance to the labour market' is growing. (Although, regarding what we outlined above, the characterisation that 'the labour market has acquired a distance to people' seems more appropriate.) Skills and levels of qualifications have changed over the past decades. And in particular for those who have received little or no education in the past it is unlikely they poses the qualifications to win a place in the labour market. Let alone the group of people that have limited (mental or physical) capacities, for them it will be difficult to find a place on the current labour market. Consequently, for a substantial (and increasing) group of people it will be extremely difficult to acquire the skills and competences that are needed for the current labour market, now or in a later stage of their career. Job design has therefore resulted in organisations having become quite exclusive (restricting access to the healthy).

In addition to this problem, the current shortages on the labour market are due to demographic developments: the so-called, 'baby-boom generation' (born between 1946-1956) is currently retiring from the labour market whilst there are not enough younger people to replace them. Therefore, there are two large societal problems: a substantial group of people that would like to work, but the high levels of requirements make it almost impossible for them to secure or

to maintain a job on the labour market. On the other hand there is a huge demand for labour, many organisations are trying to hire staff, but cannot get sufficiently qualified personnel.

Towards Inclusive Organisations

Over the last decades, work (and our society) has changed considerably. By and large the consequence is that work has become more demanding, because it is more complex, and more intense, which makes work comparable to 'top sports' in a global competition. This is largely due to different ways of organising work, using technology, and a huge emphasis on 'efficiency'. As a result, different and more skills are required to successfully participate on the labour market. Various studies support this notion (Wegman, et al. 2016; Parent-Thirion, et al. 2016). Consequently, the threshold to enter and participate in the labour market has been elevated, making it more difficult to enter, but also to maintain a position, on the labour market. Whereas originally

In principle, the above-mentioned issues are related to how work is organised. Therefore, the solution should also be found in organisations. It is clear that there is a mismatch between the qualifications on the supply side in relation to what the labour market currently demands (see also Fouarge, 2017). Thus far, attempts to remedy this situation have mainly focussed on the 'supply side' (i.e. the people) by providing more education, training, in order to improve their employability. However, as argued above, this has its limitations, for a large group of people this is for various reasons not a realistic option. This suggests that we should also look at the other side of the coin: the 'demand side' of the labour market (i.e. organisations). The problems outlined above are essential for organisations; it addresses two important HR issues for organisations. The first relates to recruitment of adequate staff: where can we find the staff we need, and secondly, how can we make sure that our current staff is not dropping out because of the high work demands (work pressure, mental health issues).

Therefore, the solutions should be found in organisations, in particular by redesigning jobs and take the capabilities of people in account, so that also people with limited capacities (i.e. disabilities) will have an opportunity to participate in organisations. In fact this is also a result of the insights from Henry Ford, who demonstrated that although people may have some limitations, they still have a capacity to work, moreover, they also have a desire to work. This means that the above-mentioned list of objectives for which job design can be used should be extended. This also means that the 'Person-Environment fit' (or person-job fit) should be amended by changing the

'environment' and thus the organisations of work instead of exclusively focussing on empowering people. Jobs should be designed with peoples' abilities in mind, in particular if we do not want to exclude large groups from the labour market, and in fact, also from society. This also implies rethinking how work is currently organised. Generally, this is the outcome of year's long accumulation of small and large changes and reorganisations, often involving introduction of technology. Reviewing and analysing the current organisational processes is the first step towards identifying tasks that are suitable for people with limitations (see Zijlstra, et al. 2017). Organisations are, by definition, the outcome of a set of intra-organisational agreements concerning 'who does what, how, and when', and these outcomes define the 'jobs'. Therefore these set of agreements need to be revised, we need to have a better eye for what is *feasible* for a person (cf. Hacker, 1978; Roe & Zijlstra, 1991). And when rethinking this aspect of feasibility of work, we also need to broaden our scope with regards to 'feasible for whom'. As outlined above work is nowadays already not feasible for a considerable group, and this group is expanding due to increasing demands caused by increased demands for efficiency. Therefore, action is needed to ensure that a job is achievable for everyone: both people with limitations, but also for current staff, for whom the sustainability of employment is at risk.

Conclusion

There are always two sides of the coin. And often W&O psychologists tend to look at only one side. W&O psychologists have too often been concerned with motivating people, and increasing the levels of motivation, intensifying commitment, or engagement, while we argue that for a large and growing number of people this is not the most relevant issue. The main issue for those people is being able to get work and/or keep work in a suitable job. Over the years work demands have become so high that for a large group of people they have become too high. This has to be remedied, and that can be achieved by adjusting how we organise our work, and thus ensuring that resulting jobs are feasible. Therefore reviewing the current design of jobs and organisations and organisations seems pertinent.

Our view is that work design should also be aiming at accessibility of organisations by adopting strategies that allow enduring inclusion of people who are thus far excluded by today's dominant work design strategies. Exclusion can be seen as the result of the required level of

intellectual and or social skills, knowledge and abilities (KSA's), or because of intensity of work demands in low-skilled jobs. Both factors, we believe, can be remedied by adequate redesign.
We agree with Parker, and colleagues (2017), who argue for a focus on the antecedents of work design. That would imply that work design should be conceived as a *dependent variable* (Mulders & Zijlstra, 2009). The long standing EU-policy aimed at combatting social exclusion, recent cautions of the IMF against growing economic inequality, echo's from the yearly summits in Davos, populists becoming a factor in many countries, are just a few relevant 'contextual factors' that urge scholars in work design to implement inclusive elements in their future proposals for work design.

Recently, the *Centre for Inclusive Organisations* (www.inclusievearbeidsorganisatie.org) has been founded and its main aim is to address these two issues: inclusiveness and sustainability of employment in organisations (see Zijlstra, 2009; Zijlstra, Mulders, Nijhuis, 2012; Fleuren, et al, 2018; van Ruitenbeek et al., 2013; 2018). This centre has developed knowledge, methods and instruments (like '*Inclusive Redesign of Jobs*' (IHW), and the *'Maastricht Work Capacity Monitor*' (MW©M)) that can help organisations to rethink and redesign their organisational processes to allow inclusion of people with limitations and at the same time address the issue of sustainability of employment of current staff. The basis consists of a thorough analysis of the organisational processes, and developing suggestions for redesign. The criteria for redesign are explicitly focussing on creating jobs of various levels of complexity and intensity (Ulich, 1978). Evidently, this requires a good understanding of the psychological impact of work demands. Thus the analysis should primarily be a 'psychological analysis' of work (cf. Roe & Zijlstra, 1991). Organisations need support with solving several Human Resources Management related issues: a) difficulty to find adequate personnel in the current labour market, and b) address current issues and complaints regarding work pressure and stress of staff. Therefore, including people, who are often excluded, might reduce HR problems of organisations, and give a boost to the motivation of current staff.

References

Blauner, R. (1964). *Alienation and Freedom: The Factory Worker and His Industry*. Chicago: The University of Chicago Press.

Carayon, P., & Zijlstra, F. R. H. (1999). Relationship between job control, work pressure and strain. Studies in the USA and The Netherlands. *Work & Stress, 13*, 32-48.

Ewen, R. B. (1964). Some determinants of job satisfaction: A study of the generality of Herzberg's theory. *Journal of Applied Psychology, 48*, 161.

Fayol, H. (1916). General principles of management. *Classics of Organization Theory, 15*, 57-69.

Fleuren, B. P. I, van Amelsvoort, L. G. P. M., de Grip, A., Zijlstra, F. R. H., Kant, I. J. (2018). Time takes us all? A two wave observational study of age and time effects on sustainable employability. In: *Scandinavian Journal of Work, Environment and Health*. Vol. 55(5), pp 475-484. Online June, 2018. doi:10.5271/sjweh.3741.

Fouarge, D. J. A. G. (2017). *Veranderingen in werk en vaardigheden*. Maastricht: Maastricht University.

Ford. H., (in collaboration with Samuel Crowther), (1923), 'My Life and Work'. Double Day, Page & Company, Garden City, New York.

Grebner,S., Elfering, A., Semmer, N. K. (2010). The success resource model of job stress, in Pamela L. Perrewé, Daniel C. Ganster (ed.) *New Developments in Theoretical and Conceptual Approaches to Job Stress (Research in Occupational Stress and Well-being, Volume 8)* Emerald Group Publishing Limited, pp. 61 – 108.

Hacker, W. (1978). *Allgemeine Arbeits-und Ingenieurpsychologie: Psychische Struktur und Regulation von Arbeitstätigkeiten*. Berlin: Huber Verlag.

Hackman J.R., & Oldham, G.R. (1974). *The Job Diagnostic Survey: An Instrument for the Diagnosis of Jobs and the Evaluation of Job Redesign Projects*. Report. Yale Univ. 87 pages.

Hackman, J. R. & Oldman, G. R., (2010). Not what it was and not what it will be: The future of job design research. *Journal of Organizational Behaviour, 31*, 463-479.

Herzberg, F. (1965). The motivation to work among Finnish supervisors. *Personnel Psychology*.

Herzberg, F., Mausner, B., & Snyderman, Barbara, B. (1959). *The motivation to work*. New York: Wiley.

ILO (2018) Labour market inclusion of people with disabilities. http://www.ilo.org/wcmsp5/groups/public/---dgreports/inst/documents/publication/wcms_646041.pdf

Johansson, G., & Lundberg, U. (1978). Psychophysiological aspects of stress and adaptation in technological societies. *Human Behaviour and Adaptation*, Vol. 18.

Locke, E. A., & Latham, G. P. (1990). *A theory of goal setting & task performance*. Englewood Cliffs, NJ, US: Prentice-Hall, Inc.

McGregor, D. (1960). Theory X and theory Y. *Organization theory*, 358, 374.

Mulders, H. & Zijlstra, F. (2009). *'Taylor revisited: 'The right job for a man' - participative work (re)design for special need groups*. Conference paper Decent Work, ILO, Geneva. https://www.ilo.org/legacy/english/protection/travail/pdf/rdwpaper25c.pdf

Nijhuis, F. J. & Zijlstra, F. R. H. (2015). De arbeidsmarktpositie van mensen met een arbeidshandicap. *Tijdschrift voor Arbeidsvraagstukken, 31*, 81-87.

Parent-Thirion, A., Biletta, I., Cabrita, J., Vargas, O., Vermeylen, G., Wilczynska, A., & Wilkens, M. (2016). *Sixth European Working Conditions Survey: Overview Report*. Eurofound (European Foundation for the Improvement of Living and Working Conditions). Dublin.

Parker, S.K., Van den Broeck, A., Holman, D. (2017). Work Design Influences: A Synthesis of Multilevel Factors That Affect The Design of Jobs. *Academy of Management Annals 2017, 11*, 267-308.

Roe, R. A., & Zijlstra, F. R. H. (1991). Arbeidsanalyse ten behoeve van (her)ontwerp van functies: een handelingstheoretische invalshoek. In J.A. Algera (ed.*), Analyse van Arbeid vanuit Verschillende Perspectieven* (pp. 179 243). Lisse: Swets & Zeitlinger.

Roe, R. A., & Zijlstra, F. R. H. (2000). Work pressure. Results of a conceptual and empirical analysis. In: M. Vartiainen, F. Avallone, and N. Anderson (Eds.*), Innovative Theories, Tools and Practices in W&O Psychology* (pp. 29-46). Göttingen: Hogrefe.

Rousseau, D. M. (1977). Technological Differences in Job Characteristics, Employee Satisfaction, and Motivation: A Synthesis of Job Design Research and Sociotechnical Systems Theory. *Organizational Behavior and Human Performance, 19*, 18-42.

Smith, J. H. (1987). Elton Mayo and the hidden Hawthorne. *Work, Employment and Society, 1*, 107-120.

Snow, R., (2013). *I invented the modern age – The rise of Henry Ford*. New York: Simon & Schuster.

Taylor, F. W. (1919). *The principles of scientific management*. New York, Harper & brothers.

Turner, A. N., & Lawrence, P. R. (1965). *Industrial jobs and the worker: An investigation of response to task attributes.* Harvard University, Division of Research, Graduate School of Business Administration.

Ulich, E., (1978). Über das Prinzip der differentiellen Arbeitsgestaltung. In: *Industrielle Organisation, Vol. 47*, pp. 566-568.

Van der Klink, J. J. L, Bültmann, U., Burdorf, A., Schaufeli, W. B, Zijlstra, F. R. H, Abma, F. I., Brouwer, S., & van der Wilt, G. J. (2016). Sustainable employability – definition, conceptualization, and implications: A perspective based on the capability approach. *Scandinavian Journal of Work, Environment and Health. 42*, 71–79.

Van Ruitenbeek, G. M. C., Mulder, M. J. G. P., Zijlstra, F. R. H., Nijhuis, F. J. N., & Mulders, H. P. G. (2013). Een alternatieve benadering van voor herontwerp van werk. Ervaringen met de methode Inclusief Herontwerp Werkprocessen. *Gedrag & Organisatie*, *26*, 104 – 122.

Van Ruitenbeek, G. Zijlstra, F.R.H., & Hulsheger, U., (2018). The Development of an instrument to measure the Work Capability of People with Limited Work Capacity (LWC). In: *Journal of Occupational Rehabilitation*. *29*(1) 163-174; https://doi.org/10.1007/s10926-018-9774-x

Wegman, L. A., Hoffman, B. J., Carter, N. T., Twenge, J. M., Guenole, N. (2018). Placing Job Characteristics in Context: Cross-Temporal Meta-Analysis of Changes in Job Characteristics since 1975. *Journal of Management, 44*, 352–386.

Zijlstra, F.R.H., (2009). Taken voor laag-gekwalificeerden: op weg naar een parallelle arbeidsmarkt? In: Projectgroep SMBA (Eds). *Innovatieve voorstellen voor Sociaal-Medische Beoordeling van Arbeidsvermogen*. Uitgave: UWV, Amsterdam, p 177-191.

Zijlstra, F. R. H., Mulders H. P. G., Nijhuis, F. J. (2012). Inclusieve Organisaties - Op weg naar duurzame arbeidsparticipatie. *Tijdschrift Voor Arbeidsvraagstukken, 28*, 21-29.

Zijlstra, F. R. H, van Ruitenbeek, G. M. C, Mulders, H. P. G, & van Lierop, B. (2017). Designing work for inclusiveness. In: Alicia Arenas, Donatella Di Marco, Lourdes Munduate & Martin C. Euwema. (Eds.), *Shaping Inclusive Workplaces through Social Dialogue*, Germany: Springer publishers. Pp. 121-137